

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: 02048807 A

(43) Date of publication of application: 19.02.90

(51) Int. Cl.

H03C 3/00
H03C 3/22

(21) Application number: 63197930

(22) Date of filing: 10.08.88

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(54) MODULATION CIRCUIT

(57) Abstract:

PURPOSE: To make the modulation constant in an equivalent way by varying a level of a signal to be modulated even if the modulation sensitivity differs in each oscillated frequency from a voltage controlled oscillator.

CONSTITUTION: A signal to be modulated f_s and a reference signal f_p from a reference signal generator 1 are given to a modulation terminal of the voltage controlled oscillator VCO while being superimposed each other through a gain adjustment device 2, whose gain is varied with an external signal. As a result, a carrier outputted from the VCO is subject to frequency modulation by the signals f_s and f_p . Then a signal f_c is given to a demodulator 3, the signals f_s and f_p are extracted, then the signal f_p is extracted via a filter 4, is converted into a DC voltage by a DC voltage converter 5. Then demodulated signals V_{p1} , V_{p2} , V_{p3} are compared with a reference voltage V_r at a voltage comparator 6 and the gain of a gain adjusting device 2 is varied by a difference voltage and V_1 , V_2 , V_3 are control voltages. Even if the modulation sensitivity differs in each oscillated frequency, the level of the signal to be

modulated is varied to make the modulation equivalently constant.

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